

ABSTRACT

The fiber-optic interferometric rotation sensor device of the invention comprises a laser source combined with an optical fiber and with a device for making the beam from the laser source interfere with the beam coming from the optical fiber, and, according to one feature of the invention, the laser source is an optical cavity having a gain lasing medium and the device includes, along the path of the beam output by the laser cavity, a beam splitter device associated with a mirror, the beam split off from the beam output by the laser cavity being sent into one of the ends of the optical fiber, the other end of which is directed toward the gain lasing medium that forms a nonlinear mirror, the splitter device being followed by a detector.